DOCUMENT RESUME

ED 438 869 JC 000 208

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TITLE	An Analysis of the California Community Colleges Library Space Standards with Proposed Revisions to the California Code of Regulations, Title 5.
INSTITUTION	California Community Colleges, Sacramento. Office of the Chancellor.
PUB DATE	1999-07-00
NOTE	30p.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Evaluative (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Libraries; *Community Colleges; *Library Development; *Library Facilities; Library Planning; Library Services; *Library Standards; Library Surveys; Quality Control; *Space Utilization; *State Colleges; Two Year Colleges
IDENTIFIERS	*California Community Colleges

ABSTRACT

This document serves as a "talking paper" for the Consultation Task Force for Library Space Standards. The current required formulae for planning library and learning resource facilities for community colleges in California are found in the California Code of Regulations (CCR), Title 5, Section 57030, "Library Space." This section has been in place since before 1974. This report, which raises issues that are not adequately addressed by the current formulae, contains the following sections: (1) Background; (2) Summary of Issues with Current Standards; (3) Goals for Community College Library/Learning Resource Center Projects; (4) Converting Day Graded Enrollment (DGE) to Full Time Equivalent Enrollment Student (FTES): Demographics of California Community College Students; (5) Stack Space; (6) Staff Space; (7) Reader Station Space; (8) Total Space; (9) Audio-Visual and Programmed Instruction Activities; and (10) Proposed Revision of CCR, Title 5, Section 57030. Library Space. The proposed revisions do not address all of the deficiencies in the current guidelines. In some areas, the final allocations have moved further away from the minimum standards, but in general, the task force chose improvement in quality, flexibility at the local level, and accessibility over quantitative guidelines. (VWC)

BOF

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An Analysis of the California Community Colleges

Library Space Standards with Proposed Revisions to the

California Code of Regulations, Title 5

A working paper prepared by
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July 1999

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BACKGROUND

The current required formulae for planning library and learning resource facilities for community colleges in California are found in the *California Code of Regulations, Title 5, Section 57030, "Library Space."* This section has been in place since pre 1974.

57030. Library Space

All library space shall be computed by assignable square feet for library functions as specified in this subdivision of this section. Square feet are "assignable" only if they are usable for the function described. Areas such as the main lobby (excluding card catalog area), elevators, stairs, walled corridors, rest rooms, and areas accommodating building maintenance services are not deemed usable for any of the described functions.

Stack space = .1 ASF x Number of bound Volumes / Number of Volumes

Initial increment = 16,000 volumes

Additional Increments:

(a) Under 3,000 DGE = +8 volumes per DGS

(b) 3,000 – 9,000 DGE = +7 volumes per DGS

(c) Above 9,000 DGE = +6 volumes per DGS

Staff space = (140 ASF x Number of FTE Staff) + 400 ASF / Number of FTE Staff

Initial increment = 3.0 FTE

Additional Increments:

(a) Under 3,000 DGE = +.0020 FTE Staff per DGS

(b) 3,000 – 9,000 DGE = + .0015 FTE Staff per DGS

(c) Above 9,000 DGE = + .0010 FTE Staff per DGS

Reader Station Space = 27.5 ASF x Number of Reader Stations / Number of Reader Stations

Initial increment = 50 stations

Additional Increments:

(a) Under 3,000 DGE = +.10 stations per DGS

(b) 3,000 – 9,000 DGE = + .09 stations per DGS

(c) Above 9,000 DGE = + .08 stations per DGS

Total Space = Initial increment = 3,795 ASF

Additional increments:

(a) Under 3,000 DGE = +3.83 ASF per DGS

(b) 3,000 – 9,000 DGE = + 3.39 ASF per DGS

(c) Above 9,000 DGE = + 2.94 ASF per DGS

For audio-visual and programmed instruction activities associated with library, learning resource functions, additional areas sized for individual needs but not exceeding the following totals for the district as a whole:

Total Space =	Initial Increment = 3,500 ASF	
	Additional increments	
	(a) Under 3,000 DGE	= +1.50 ASF per DGS
	(b) 3,000 – 9,000 DGE	= + .75 ASF per DGS
	(c) Above 9,000 DGE	= + .25 ASF per DGS

The total library learning resource center space allocation is

- the sum of Stack Space, Staff Space, Reader Station Space and audio-visual and/or programmed instruction space; or
- calculated differently using the sum of Total Space (different formula) and audio-visual and/or programmed instruction space.

In addition to these regulations, Districts utilize the Space Inventory handbook, which defines the room use number assigned to each space. Library and media space appears in the 400 and 500 categories, primarily 410 through 455 and 530 and 535. Additionally office space would be categorized as 310 space.

The following document served as a "talking paper" for the Consultation Task Force for Library Space Standards. The document includes material which is derived from *"Information Resource Facilities for the 21st Century: a Framework for Planning"* [1]; *"A review of library space standards for the California Community Colleges"*;[2] *"A Study of the System's Library and Learning Resources over a Period of Seven Years"*[3] and *"Standards for Community, Junior, and Technical College Learning Resource Programs."*[4]

[1] Task Force on Facility Planning for Library and Information Resources. The California State University. April 1996.
[2] Presented to the Chancellor's Office by J. Matthews and Associates, Inc. March 1985.
[3] California Community Colleges. Library and Learning Resources Program. May 1997.
[4] Final version approved by ALA, ACRL, and AECT.

SUMMARY OF ISSUES WITH CURRENT STANDARDS

Following is a broad summary of discussion issues relating to the current Title 5 formulae.

Stacks. Recommended collection allowance is small and does not include provision for non-print materials; current volumes per capita per guidelines and volumes actually held puts California Community Colleges in lowest percentile nationally. Further, the current formula penalizes small colleges with allocations below minimum core collection requirements. Community College curriculum is still largely based on print materials. Space allocation is also required for non-print as well as auxiliary functions including storage, document delivery, and systems space.

Reader Stations. Space allocation per reader seat is too low for current learning styles, technology requirements, seat to stack distribution, and ADA guidelines creating many unusable or undesirable seats.

Staff. Space allocation for staff is too low when spread to cover public service desks, task and shared workstations, student workspace, storage, and other requirements including desktop technology.

Instruction. The crucial requirement for instructional space is not recognized.

Formula. Formula is based on DGE, a little used statistic. Many districts do not have information available and use of this figure makes comparison with other entities difficult. More importantly, the DGE formula does not acknowledge the substantial numbers of students who enroll in evening classes and/or who use facilities in the evening.

GOALS FOR COMMUNITY COLLEGE LIBRARY/LEARNING RESOURCE CENTER PROJECTS

Some of the guiding principles that colleges have used in planning new facilities follow. These are useful in assessing the success of the final project as well as evaluating the effectiveness of the current Title 5 regulations.

- Support the District's curriculum
- Meet Title 5 guidelines
- Create a balance of user and collection space
- Recognize different teaching and learning styles
- Provide for information storage in many formats
- Provide for flexibility and multiple use
- Provide space for and recognition of emerging technologies[5]
- Meet ADA, code, and seismic guidelines
- Maximize staff efficiency in regard to basic delivery of services, programs, and security issues
- Create a facility and infrastructure to serve the entire district and community within the district
- Create learning and teaching environments that are innovative and inviting.

[5] New California State University guidelines allocate 20% of total space to integrated instructional resource facilities.

A. CONVERTING DGE TO FTE: DEMOGRAPHICS OF CALIFORNIA COMMUNITY COLLEGE STUDENTS

Over 1,475,000 students were enrolled in California Community colleges in the fall of 1998. The system consists of 71 districts with 106 colleges throughout the state of California. Nearly 50% of students are under the age of 24, and 60% are under the age of 29. The ethnic profile of enrollment closely parallels the population composition of the state of California with the colleges having a slightly higher representation of Asian Americans (1 to 2 % higher) and a slightly lower representation of Hispanic students (6% lower).

Daytime enrollment as percentage of total	66%
Evening enrollment as percentage of total	33%
Graded enrollment as percentage of total enrollment	86.4%
First time students each year	29%

Space Calculation and Day Graded Enrollment

The current Title 5 guideline for space planning is based on the district's Day Graded Enrollment (DGE). By using the number of day graded students (DGS) to drive the formulas for the allocation of stacks, staff, and reader spaces, the guideline ignores the evening enrollment, which represents 33% of the student population statewide[6]. This oversight has been noted in several previous reports.

Using the full time equivalent enrollment student (FTES) as the multiplier[7] would be more consistent with other Title 5 California Community College regulations, and consistent with the CSU system, as well as other professional, and accreditation (AACJC) agencies for comparative and evaluative purposes.

Using data available from the Chancellor's Office for the past five years of enrollment as well as data from various districts the following conversion formula was derived. Day graded enrollment is calculated at 70% of total graded enrollment; total graded enrollment is 86.4% of total enrollment; and full time equivalent student count is 70% of total enrollment. It is recognized that this conversion formula may not be accurate for every District, every semester. It presents a broad guideline for assessing the impact of converting the multiplier from DGE to FTES with the ultimate goal of the conversion being to create an FTES based formula which is consistent with other state and national guidelines.

(see table next page)

[6] The relationship between DGE and Total enrollment is slightly modified from one-third/ two-thirds, since many evening students are also taking courses which meet before 4:30 p.m. which would include them in the DGE count as well.

[7] WASC. Standards of good practice matrix. Standard 7. Facilities.

Day Graded Enrollment	**2000**	**7000**	**14000**	**20000**
Total Graded Enrollment	2857	10000	20000	28571
Total Enrollment	3307	11574	23148	33069
Full time equivalent @ 70% of total enrollment	**2315**	**8102**	**16204**	**23148**
Full time equivalent @ 77% of total graded enrollment	2200	7700	15400	22000

Conversion estimates of DGE to FTES for small, medium and large Districts.

The variation using these two different multipliers based on current Title 5 formulae above are illustrated below for a campus of 7000 DGS. This approach serves to address only one issue and is presented only as illustration, not recommendation.

		Volumes	Stacks space	Staff	Staff space	Seats	Reader space	Audio Visual	Total	Sq. Feet per student
DGS	7000	68000	6800	15	2500	710	19525	11000	39825	5.68
FTE	8102	75714	7571	16.7	2731	809.18	22252	11826	44380	5.47

~~Table: Space allocation for a campus enrolling 7,000 DGS based on Title 5 regulations.~~

B. STACK SPACE

This category includes shelving space for circulating, reference, and reserve print collections including monographs and bound and loose periodical literature. The category is expanded to include newer formats of non-print materials as well as more traditional formats such as microfilm and renamed "Collections Space."

Background and Comparative Data

Community College Library Directors have said that curriculum is still largely print based and that their expectation is to provide services and facilities as good as those offered at a four year institution. Scholars and researchers currently quote that approximately 5% of sought information can be found on the Internet. Accreditation and professional organizations, such as regional accrediting commissions and the ACRL, have maintained their guidelines for collecting print, for the time being.

Print holdings in college and university libraries vary from college to college and university to university, based on the institution's ranking, number of graduate programs supported, number of academic disciplines supported, and often, proximity to other library collections. [8] The most competitive institutions, (those with the most stringent admissions policies) based on a study of the Oberlin Group, average over 275 volumes per FTES student. A study of California colleges that are rated from non-competitive to minimally difficult for admissions shows a range of holdings from 30 to 60 volumes per full time equivalent student[9]. Holdings at California State University Libraries range from 70 to 100 volumes per full time equivalent student. Nationwide community colleges average approximately 15 volumes per capita.[10]

Collection Size

It has long been recognized that a core collection offering introductory and reference materials in a breadth of subject areas taught in two and four colleges would range from 40,000 to 60,000 volumes.[11]

Library holdings at California Community Colleges based on the current Title 5 regulations for various size institutions are illustrated below. The Title 5 regulations put holdings per capita in California Community Colleges far below the national average. In addition to this, The California Research Bureau reported in 1993-1994, that 85% of the colleges had collection deficits. The latest data indicates that statewide, total holdings are at only 60% of the Title 5 regulations.

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[8] Proximity to other institutions was noted as a factor in 1974 edition of Standards.

[9] Including New College, Coleman College, Patten College, and Humphrey's College to a high of 234 at La Sierra University, which is rated minimally difficult

[10] California Community Colleges, Library and Learning Resources Programs. A study of the Library and Learning Resources over a period of seven years 1988-1989 to 1994-1995. May 1997. Chancellor's Office. California Community Colleges.

[11] See Core Collections for College Libraries (ACRL), Editions 1, 2, and 3. Books for College Libraries

DGE	FTES	Volumes	Space	Vols. Per DGS	Vols. Per FTES.
2000	2315	32000	3200	16	13.8
7000	8102	68000	6800	9.71	8.4
14000	16204	112000	11200	8	6.9
20000	23148	148000	14800	7.4	6.4

Table: Holdings based on current Title 5 regulations for various sized institutions

As noted above, it is recommended that since collections are used by both day and evening students who attend community colleges that the size of the collection be based on full time equivalent enrollment, not Day Graded Enrollment and that the initial increment be increased to 25,000 volumes.

DGE	FTES	Volumes	Space	Vols. Per DGS	Vols. Per FTES
2000	2315	34519	3452	17.3	14.91
7000	8102	75714	7571.4	10.8	9.35
14000	16204	125222	12522.2	8.9	7.73
20000	23148	166889	16688.9	8.3	7.21
				Average	9.8

Table: Collections based on FTES using current Title 5 formula.

Increasing the initial increment to 25,000 volumes yields the following results and increases the average number of volumes per capita to 11.28.

DGE	FTES	Volumes	Space	Vols. Per DGS	Vols. Per FTES
2000	2315	43519	4351	21.8	18.80
7000	8102	84714	8471	12.1	10.46
14000	16204	134222	13422	9.6	8.28
20000	23148	175888.9	17589	8.8	7.60
				Average	**11.28**

Table: Holdings based on DGS converted to FTES (using current formula) with initial increment increased to 25,000

Another approach to evaluating the proposed guideline would be comparison with the ALA/ACRL – AECT Minimum Standards for Libraries (Modified) which is illustrated below and appears in California Code of Regulations Title 5 Section 58724.

ALA/ACRL AECT Minimum standards (modified)

College Size	Materials	
FTES	Periodicals	Volumes

<1000	230	30000
1001 - 3000	300	40000
3001 - 5000	500	60000
5001 - 7000	700	80000
Each additional 1K	50	7,500

College Size: FTES	Volumes Based on ALA/ACRL	Volumes Based on modification	Volumes Based on Current Title 5
2315	40000	43519	32000
8102	87500	84714	68000
16204	147500	134222	112000
23148	200000	175888.9	148000

Chart: Stack space required based on ALA/ACRL AECT Minimum standards (modified)

Using the proposed modification, the collection size is increased from current Title 5 regulations, but still does not meet the minimum ALA/ACRL guideline except for the smallest institution.

Space allocation for collections

Further, it is recommended that new facilities allow for adequate collection growth space. Typically institutions add between 3 – 5% of existing volume holdings annually (net) and plan expansion space for a minimum 15-year planning cycle. Considering annual growth and length of expansion cycle, the stack area should be planned for a 45 – 75% increase over existing conditions. This would, of course, result in facilities which appear less full at opening day, but would alleviate the loss of valuable reader stations over the course of the planning cycle as holdings outgrow stack space.

It is recommended that the Title 5 guideline reduce the space allocation for book stacks from 10 volumes to 12 volumes per square foot recognizing the high turnover[12] and circulation rates for community college collections. This high turn over rate more closely parallels conditions at public libraries, which typically allocate space at 15 volumes per square foot compared to university collections which allocate space at 10 volumes per square foot.

This recommendation is further supported by the content of the collections, which do not include materials supporting the curricula of graduate medical or legal programs or large reference or bound periodical volume collections, which results in thicker volumes requiring more space to house. CSU reports 9.91 volumes per square foot for materials supporting university curriculum and with a lower turn over rate.

DGE	FTES	Volumes	Space @ 10	Space @ 12

[12] Turnover: Circulation at University libraries is typically 1:5 or one circulation annually per five volumes held, or less (as low as 1:10). Circulation at public libraries is typically 5:1, or five circulations per one volume held (high turnover). Community college circulation is approximately 2:1 or 10 million circulations of the 5 million items held statewide.

			volumes per square foot	volumes per square foot
2000	2315	43519	**4352**	**3627**
7000	8102	84714	**8471**	**7060**
14000	16204	134222	**13422**	**11185**
20000	23148	175888.9	**17588**	**14657**

~~Table: Holdings based on FTES with initial increment increased to 25,000 volumes with space allocation reduced to 12 volumes per square foot.~~

Other Factors

Since the guidelines do not recognize the geographic location of the district, institutions may want to take into account proximity of other institutions in determining whether to meet the Title 5 recommendations.

Collections serving community college students should be readily accessible in well-lighted open stack areas. Good signage and way-finding devices are critical since approximately 29% of the student population are new (first time) students.

Compact and Remote Storage Installations

In general, 20% of a library's collection is responsible for 80% of the circulation. Items identified for remote storage are usually culled from the bottom 20% of the remaining 80% of the collection. Appropriate materials include long runs of back journals, which must be indexed to remain useful; monographic series; and superceded editions. None of these are common in community college collections. Research and university collections, which typically use remote storage, generally relocate no more than 18% to 25% of holdings to these facilities. For the largest community college collection to relocate 30,000 volumes to remote storage, the total net space savings on site would be only 3,000 square feet. Further, the cost of setting up the site, and the annual costs of material retrieval and return would be prohibitive based on the size of the staff and personnel budget available. The use of remote storage or movable aisle compact shelving units is not recommended for community college collections, which are high use collections.

Institutions use similar criteria to determine items for relocation to movable aisle compact shelving units. The current California State University guidelines recommend that 40 volumes per student, with a minimum of 400,000 volumes, be available on open shelving and that additional collections be placed on movable aisle compact shelving units. In many cases this results in over 50% of holdings being placed on movable aisle compact shelving units.

Non-print materials

The Title 5 regulations do not provide specific additional storage space for non-print collections. These collections, including microform, video, CD and CD-ROM, as well as other non-print formats must currently be housed at the expense of print collections, reader space, or staff space in closed stack areas. The California State University system has taken a lead in this area by allocating 40% of the quantity of the space allocated for print to non-print, in addition to collections space. Currently these collections are housed in audio-visual and programmed instruction space, frequently 535, or in book storage space (400's).

Principles:

- Library/Learning Resource Center Program serves both Day and Evening students equally. Title 5 regulations should be based on full time equivalent students.
- Library collections are currently under-serving community college students relative to other educational institutions.[13]
- The need for access to print materials will continue through the next 20 year planning cycle.
- The size of the initial increment needs to be increased to recognize the requirements of a basic core collection, particularly to serve smaller institutions and those without close proximity to other resources.
- Space allocations for print collections can be reduced to recognize high circulation rates.
- Compact or remote storage is not recommended.
- Space is required for storage of non-print materials

Consultation Task Force Discussion

Discussion focused on the need to increase collection size(s) to meet current requirements. Student representative discussed the desirability of maintaining open stacks to allow browsing and serendipitous discovery and the need for larger print collections in support of curriculum. Both compact shelving and remote storage were seen as impediments to access.

The group also discussed the added expense of compact shelving, even in the largest of facilities, and the cost of retrofitting existing structures to bear the load requirements.
New facilities would have to be overbuilt to support the load requirements and typically new facilities or additions to existing facilities must also respond to the power and data requirements for additional technology. Factoring in the cost of the moveable compact shelving units, the group noted that in most cases the cost would be prohibitive.

The group also discussed the necessity of providing districts the flexibility to develop collections of all formats with a mixture of print and non-print to meet local curricular requirements and to respond to other local resources. The space allocation previously named "audio-visual" would become a more flexible "instructional support technology" space, which could be used for workstations, instructional stations, and non-print collections in support of the library program.

[13] A cumulative deficit of 4.4 million book volumes was reported in 1994 (85 of 105 colleges reporting).

The committee discussed the importance of technology as a tool and as a supplement to other collections, but there are limitations on the full text available in many areas, at this time.

Summary

The recommended modification increases the initial increment to 25,000 volumes and bases the additional increment formula on FTES. While this increases holdings over current Title 5 guidelines, it fails to meet the minimum ALA/ACRL AECT recommendations. Space allocation per volume is reduced from 10 volumes per square foot to 12 volumes per square foot. This is acceptable based on a higher percentage of materials in circulation as well as the nature of the collections, but is not to be accomplished at the expense of disabled access which is unanimously endorsed as a project goal. Renaming stack space as collections space allows the flexibility to meet the volume count in a variety of formats. Integrated information resource space, formerly audio-visual, can be used to house multi-media (non-print materials) in support of the curriculum.

Recommended modification

Modified Title 5:

Collection space .0833 assignable square feet x Number of Bound Volumes
Number of Bound volumes
Initial increment = 25,000 volumes
Additional increments
(a) Under 3,000 FTES = + 8 volumes per FTES
(b) 3,000 to 9,000 FTES = + 7 volumes per FTES
(c) Above 9,000 FTES = + 6 volumes per FTES

Impact

The additional space allocation required is small for smaller districts. Larger districts net a space savings in collection storage space.

	Based on Current Title 5			Based on recommended revision			
DGE	Volumes	Space	FTES	Volumes	Space	% volume increase	% space increase
2000	32000	3200	2315	43519	3627	36%	13%
7000	68000	6800	8102	84714	7060	25%	4%
14000	112000	11200	16204	134222	11185	20%	0%
20000	148000	14800	23148	175888	14657	19%	-1%

Space requirements based on recommended revisions ALA/ACRL AECT Minimum Standards

C. STAFF SPACE

This space includes all space required for library operations including circulation, reserve, periodical, and reference desks; administrative, faculty, and support staff offices; shipping and receiving; technical services spaces including shared and task workstations, acquisitions, cataloging, mending, binding, gift evaluation, and the tools required for these tasks; workstations used by work study students and staging areas for these students; as well as space for materials in transition in each of these areas. It is renamed Operations and Staff Space in the recommended revision.

Background and Comparative Data

The California State University formula for technical processing and public service space has been in effect for the past 15 years and is retained without change in the April 1996 document. Space for library staff is provided at the rate of 225 assignable square feet per projected staff member.

Since the work performed by library faculty and classified staff in the community college system and in the CSU system is in essence the same work (supporting different curriculum) and has the same space requirements, the present 140 square feet allocation per staff seems inadequate. The additional increment of 400 assignable feet in Title 5 does not cover the need for a minimum number of all public service stations (including as many as 6: circulation, reference, reserves, interlibrary loan, periodicals, audio-visual, etc.). In addition to this, space is also required for shared and task workstations including cataloging, mending, processing, interlibrary loan, bibliographic instruction consultation, shipping and receiving, storage, gifts evaluation, and collection management areas. When colleges rely heavily on student employees, additional space requirements are needed for workstations and staging areas.

The *Standards for Community, Junior, and Technical College Learning Resource Programs* (1994) recommends "a minimum of 175 square feet per staff member to accommodate new technologies, equipment, and hardware is desirable. Individual offices for professional staff and administrators should be figured at 200 square feet per person."

Earlier recommendations to increase the staff space allocation using a multiplier of 1.2 times the number of FTES staff to recognize the many part time staff members results in a square foot allocation per staff member of 168 assignable square feet. This is still far below the CSU model of 225 and does not result in an acceptable level of space per staff member.

Staff Count

A more simplified approach to staff allocation than the Title 5 guidelines would be to use the ALA/ACRL – AECT Minimum Standards for Libraries (Modified) which is illustrated below.

College Size	Type of Staff	
FTES	Faculty Librarian	Support
<1000	2	3
1001 – 3000	3	4.5
3001 – 5000	4	6.5
5001 – 7000	5	9
Each additional 1K	0.5	1

College Size: FTES	Staff ALA/ACRL minimum	Staff using Title 5 Based on DGE	Staff using Title 5 Based on FTES
2315	7.5	7	7.6
8102	15.5	15	16.6
16204	27.5	23	25.2
23148	38	29	32.

Principles:

- FTES staff allocation must include space for public service, task, and shared workstations
- Increase per FTES staff allocation to CSU standard of 225
- Link staff FTES allocation to District FTES.

Consultation Task Force Discussion

The group discussed the importance of appropriately defining the functions performed in "staff" space. The widely held perception that staff space is "office" space does not reflect the number of support tasks and materials that must be accommodated. The group agreed that this is an area that is problematic with the space allocated by Title 5. CSU guidelines are based on projected staff with225 assignable square feet allocated per staff member. After much discussion, the group agreed that the formula should be simplified and revised to recommend an across the board increase to 225 assignable square feet per staff member, and that the initial increment of 400 square feet be deleted.

Since current actual staffing levels system wide are at less than half of the Title 5 guidelines and less than 30% of the ACRL guidelines, the committee agreed that it would not make a great deal of sense to increase the recommended number of FTES staff. A recommendation was made to decrease the formula as the size of the district increased.

Summary

The recommended modification includes the conversion of DGS to FTES, the elimination of the 400 assignable square foot initial increment, a decrease in the additional increment over 3,000 FTES, and the increase of assignable square feet per staff member from 140 to 225. The increased staff space would accommodate back of house support space, the additional service points required at public service desks, the requirements of desktop technology, and the transitional space required for library materials.

Recommended modification

Operations and Staff space = (225 ASF x Number of FTE Staff)
Number of FTE Staff

Initial increment = 3.0 FTE

Additional Increments:

(a) Under 3,000 FTE = + .0018 FTE Staff per FTE

(b) 3,000 – 9,000 FTE = + .0012 FTE Staff per FTE

(c) Above 9,000 FTE = + .00075 FTE Staff per FTE

Impact

The revised formula increases the staff space roughly 30% across the board, but reduces staff numbers without impacting smaller districts. Since few districts staff at full Title 5 allocation, this should have little impact on operations and services.

College Size: FTES	Staff Space Title 5	Staff Space Title 5 current	Staff Recommended modification	Staff Space Recommended modification
2315	7	1380	7.2	1612.6
8102	15	2,500	14.5	3267.5
16204	23	3620	21.0	4725.7
23148	29	4460	26.2	5897.5

FTES	% staff increase	% staff space increase
2315	2%	17%
8102	-3%	31%
16204	-9%	31%
23148	-10%	32%

D. READER STATION SPACE

The area includes stations at group study tables, individual carrels, oversized carrels, multi-media workstations, group study and collaborative workrooms, lounge seats, and other user workstations as required by the library program. This category is renamed User Stations.

Background and Comparative Data

The number of user stations averages approximately 1 seat per 10 students, or less for larger institutions, using the current Title 5 Regulations. This number is derived from a complicated formula based on day graded enrollment. Library Directors note that the facilities are used equally by day and evening students and that the libraries are frequently filled to capacity in the evening with day students.

Four-year colleges currently use the ACRL guideline of one seat per four, or one per five, full-time equivalent students to calculate seating requirements for the library/learning resource center. At one half this number, the community college guidelines still seem adequate, but in fact, few community colleges come close to reaching the Title 5 regulations and many of these seats are of inferior quality.

Size and Organization of Seating

Library planners abandoned the use of tables for six and tables for eight long ago. A table for six rarely seats more than two or three students, with the individual's preference being not to be seated next to someone they don't know. This leaves a table for six with three students, two backpacks, and feet up on the other seats. In effect -- three useful seats. Less desirable still is the situation when the six students are acquaintances, sit at the same table in an open area, and proceed to carry on conversation disturbing those around them.

Efficiency of space utilization is often affected by a combination of elements. For example, the combination of seating and stack units allows the sharing of aisles and a more efficient layout of the space. In a college or university library, the ratio of stacks to seats is typically much higher at approximately 3:1. Using the current California State University planning regulations, which mandates a smaller stack area through the use of compact shelving units yields a ratio of approximately 5:4. In these college and university library facilities, the stacks serve as a buffer for larger seating areas and allow for greater efficiency of reader seat space. In the typical community college facility based on Title 5 regulations the ratio of stacks to seats is approximately 1:3, with more than half of the total space being allocated to reader stations. This creates extreme inefficiencies as well as undesirable areas overcrowded with seating.

Space Planning Standards

In addition to this, the space allocation guideline of 27.5 square feet per user station precedes both the current Americans with Disabilities Act and the requirements of desktop technology, making it virtually impossible to meet the seating guidelines in the space allocated.

Cited below are two current spaces planning guidelines from the literature.

Library Administration and Management Association, American Library Association, Buildings and Equipment Section. Building Blocks for Library Space. Functional Guidelines, 1995.

	ASF required per person
Table for four: four seats	30
Computer workstation, work surface, chair with printer:	45.5
Terminal, work surface, chair:	36
Carrel, adult, youth, undergraduate:	36-45.5
Library Instruction, student seating:	20
Listening areas, individual	36-45.5
Microfilm/fiche reader printer:	36
Microfilm/fiche reader printer with tablet arm:	61.75

Determining your public library's future size. Lee B. Brawner, ALA, 1996.

	Assignable square feet required per person
Adult/Youth at reading table	25 – 30
Adult/Youth at lounge seating	40 – 50
Adult/Youth at carrel	40
Adult/Youth at electronic carrel	45
Conference room seating	30
CD-ROM station with printer	100

The standards (7.1) in *Standards for Community, Junior and Technical College Learning Resource Programs* (1994) are the following:

- Individual carrels, 25 sq. ft. per student
- Tables for four, 25 sq. ft. per student
- Lounge chairs, 30 sq. ft. per student
- Computers and workstations, 40 sq. ft. per student
- Microform reader stations, 35 sq. ft. per student

- Small group study rooms, 25 sq. ft. per student

"In addition to seating, public services areas should include space for public access catalogs, current periodicals, indexes, reference and technology delivery areas, display and exhibit space, group bibliographic instruction, group viewing, and study areas for faculty."

Current community college learning resource center projects include a high percentage of electronic workstations, collaborative workroom stations, individual carrels, and a lesser percentage of soft seating and shared reading tables than in the past. Collaborative learning requires oversized workstations for two students, a student and a librarian, or a student and a faculty member to work together; as well as collaborative work rooms for groups of four, six and eight to work together without disturbing the rest of the users.

It is recommended that the total seating allowance be based on of FTES and that this space be allocated to various categories, including study tables, individual study carrels, collaborative spaces, and electronic learning stations. Further it recommended that the space allocation for these stations be right-sized based on the revised space planning guidelines noted above.

DGE	Reader Seats	Space	FTES	Reader Seats	Space @ average 32.5 asf per seat
2000	250	6875	2315	235	7644
7000	710	19525	8102	647	21032
14000	1290	35475	16204	1214	39464
20000	1770	48675	23148	1700	55262

Table: Seating formula based on FTES with Reader Space formula revised to reflect less, but more useable seating

Principles:

- High ratio of seats to stack areas creates inefficient and undesirable seating organization
- Current space allocation per seat unit increased to meet ADA requirements
- Current space allocation per seat unit increased to meet current learning styles, including collaboration
- Current space allocation per seat unit increased to meet increased demands for electronic learning stations
- Current seating allocation based on FTES, not DGE, but guideline changed to recognize change

Consultation Task Force Discussion

Discussion focused on the need to provide space, which reflect current learning styles as well as meet disabled access requirements. The group endorsed the concept of increasing the unit size and allowing for a slight reduction in the number of seats. The importance of ADA was reaffirmed as well as a commitment to providing quality study space. Several committee members stressed the importance of collaborative and flexible space and the differing needs of individual districts. The space implications of desktop technology were discussed.

One committee member also served on the committee that drafted "Standards for Community, Junior, and Technical College Learning Resource Programs". She discussed the lower per seat space allocation based on the larger number of community college campuses across the country, which are residential in nature. These students do not necessarily use the library as their "office for the day" and frequently have access to a personal computer in their dormitory room on the campus.

Summary

The modified formula is linked to FTES students. The assignable square feet per workstation is increased and the ratio for additional increments is decreased. The net result is a slight decrease in the number of seats available and a reduction in the number of seats per capita from 1 per 10 to 1 per 12 for larger districts.

Recommended modification

Modified Title 5:
User Stations Space =32.5 ASF x Number of reader stations

Number of Reader Stations
Initial increment = 50 stations
(a) Under 3,000 FTES. = .08 stations per FTES
(b) Above 3,000 FTES = .07 stations per FTES.

Impact

The net impact is a small decrease in the number of seats available (4 – 9%) and a small increase in the amount of space available for user (8 to 14%)

DGE	Reader Seats	Space	FTES	User Stations	Space @ average 32.5 as per seat	% change in # seats	% increase in space
2000	250	6875	2315	235.2	7644	-6%	11%
7000	710	19525	8102	647.14	21032	-9%	8%
14000	1290	35475	16204	1214.28	39464	-6%	11%
20000	1770	48675	23148	1700.36	55262	-4%	14%

E. TOTAL SPACE

Background and comparative data

Total library space per student at colleges and universities across the United States ranges from four square feet per FTES to higher than 58 square feet per student. The current California State University Regulations provide for approximately 17.5 gross square feet per FTES at an enrollment of 15,000 and 15.5 square feet per FTES at 25,000 enrollment.

Using the current Title 5 regulations, the library space allocation for community college students in California falls in the lowest percentile. In fact, the average assignable square feet of library space per community college student in 1994 was 2.42.

	Enrollment	Stacks	Staff space	Reader space	Total Space	Total Gross Space	Square feet per student
Day graded enrollment	**7000**	6800	2500	19525	28825	37473	5.35
FTES	8102	6800	2500	19525	28825	37473	4.6
Day graded enrollment	**14000**	11200	3620	35475	50295	65384	4.67
FTES	16204	11200	3620	35475	50295	65384	4.0

Summary

The Total Space formula should be the sum of

- (A) Collections Space ("Stack space")
- (B) Operations and Staff Space (Staff space")
- (C) User Stations Space (Reader Station space")
- (D) Instructional Support Technology Space ("Audio-visual and programmed instruction").

(Total Space = A+B+C+D)

F. AUDIO-VISUAL AND PROGRAMMED INSTRUCTION ACTIVITIES

Instructional and Collaborative Space

Instructional space has become crucial to community college library programs. Examining "Comparing Educational Paradigms" (*CCL Outlook*, Council of Chief Librarians, CCC) the concepts which are stressed are "producing powerful learning environments, teamwork, specified learning outcomes, greater learning for fewer resources and less student time".

The information competency program has increased significantly throughout the college system and is provided through a variety of techniques. Library and information competency courses are more successful when offered through the library than when offered by other departments.[14]

Formerly reference librarians would instruct each student individually in the use of the card catalog, print index, keyword concept, and the wide array of materials available in a discipline. Bibliographic instruction took hold as an important role of academic librarians, in the 1960's and 1970's, when librarians realized that they could more efficiently teach large groups of students with standardized curriculum and spend valuable professional time developing curriculum and working with individual students on specific assignments. This concept is just a true for the use of digital resources today. Only with full-equipped library classrooms can librarians begin to make a dent in the number and type of instructional sessions required to prepare today's students.

This is even truer in community colleges where the librarian to student ratio is significantly lower than at other institutions, and where the student population is less likely to have a personal computer at home. Since libraries are currently in competition with other academic departments for much needed classroom and instructional laboratory space, it is recommended that the Space Inventory handbook be revised to allow the inclusion of library instructional laboratory space (hands on) in the 410 category, user stations. This space need not be in addition to reader space, but can be calculated as a percentage of the seating allocation. Many institutions have found that they are able to utilize lab space as open user space if the facility is designed to accommodate this.

It is recommended that the space allocation formerly known as "audio-visual and programmed instruction space" be renamed "Instructional Support Technology" and that it be define to support:

- multi-media workstations and materials,
- curricular development space,
- instructional space in support of the library and learning resource programs,
- non-print production and storage areas, and
- remaining materials still categorized as audio-visual.

In addition to the items noted above, the formula should also include space for

[14] California Community Colleges, Library and Learning Resources Programs. A study of the Library and Learning Resources over a period of seven years 1988-1989 to 1994-1995. May 1997. Chancellor's Office. California Community Colleges.

- library network equipment and systems,
- storage,
- non-print materials,
- and printing and document delivery (or included in increased service desk space).

(Space currently supporting audio-visual presentation in the classroom or district wide should be excluded from this category. This space would become the 530 and 535 space in the Space Inventory Handbook.)

Summary

Following the example of the revised CSU guideline which allocates an additional 40% of collection space to non-print materials, and which further redefines 20% of total space to "integrated information resource facilities," it is recommended that Instructional Support Technology Space be allocated

- with an initial increment of 1,500 square feet;
- + a square footage amount equal to 40% of Collections Space (A),
- + a square footage amount equal to 20% of the total of Operations and Staff (B) and User Space (C).

Recommended modification

Instructional Support Technology = Initial increment: 1,500 square feet
+ (A) Collections space * .40
+(B + C) (Operations and Staff + Users Space) * .25

Impact

	Current Title 5	Recommended Modification
DGS 2000 / FTES 2315	6500	3765
DGS 7000 / FTES 8102	11000	8899
DGS 14000 / FTES 16204	13750	15521
DGS 20000 / FTES 23148	15250	21153

PROPOSED REVISION

CALIFORNIA CODE OF REGULATIONS, TITLE 5, SECTION 57030. LIBRARY SPACE

The proposed revisions do not address all of the deficiencies in the current guidelines. In some areas, the final allocations have moved further away from the minimum standards, but in general, task force chose improvement in quality, flexibility at the local level and accessibility over quantitative guidelines.

(A) Collection space	.0833 assignable square feet x Number of Bound Volumes Number of Bound volumes Initial increment = 25,000 volumes Additional increments (a) Under 3,000 FTES. = + 8 volumes per FTES (b) 3,000 to 9,000 FTES = + 7 volumes per FTES (C) Above 9,000 FTES = + 6 volumes per FTES
(B) Operations and Staff space =	(225 ASF x Number of FTE Staff) Number of FTE Staff Initial increment = 3.0 FTE Additional Increments: (a) Under 3,000 FTES = + .0018 FTE Staff per FTE (b) 3,000 – 9,000 FTES = + .0012 FTE Staff per FTE (c) Above 9,000 FTES = + .00075 FTE Staff per FTE
(c) User Stations Space =	32.5 ASF x Number of reader stations Number of Reader Stations Initial increment = 50 stations (a) Under 3,000 FTES = .08 stations per FTES (b) Above 3,000 FTES = .07 stations per FTES
(D) Instructional Support Technology =	Initial increment: 1,500 square feet + (A) Collections space * .40 +(B + C) Staff and Users Space * .25
Total Space	Sum of A, B, C, D

Impact

DGS 2000/FTES 2315	User Space	Staff Space	Collections	Instructional Support Technology	Total
Current Title 5	6875	1380	3200	6500	17955
Recommended modification	7644	1612	3627	3765	18147.8

DGS 7000/8102 FTES					
Current Title 5	19525	2500	6800	11000	39825
Recommended modification	21032	3267	7060	8899	41757.75

DGS 14000/16204 FTES					
Current Title 5	35475	3620	11200	13750	64045
Recommended modification	39464	4725	11185	15521	72395.25

DGS 20000/23148 FTES					
Current Title 5	48675	4460	14800	15250	83185
Recommended modification	55262	5897	14657	21153	98468.55

Or, to look at the recommended guidelines in terms of national averages, they produce the following per capita allocations for seats and volumes, and the full time equivalent staff total as noted below. The number of square feet of (gross) space per capita ranges from 10.1 for the smallest districts to 5.52 to the larger districts.

FTES	User Stations	Seats per capita	Staff	Collections	Volumes per capita
2315	235	1 for 9	7.2	43524	19
8102	647	1 for 12.5	14.5	84720	10
16204	1214	1 for 13	21.0	134220	8
23148	1700	1 for 13	26.2	175884	8

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
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